

### AMENDMENTS TO THE SPECIFICATION

Please amend paragraphs 042, 045, 061, 064, 065, and 066 in the Specification as follows:

[042]  $\text{AccumValue} = (\text{CumWeightedValue}/\text{CumWeight})$  \*

$\text{CumWeightedArea}$ , wherein

[045] Weight in the above calculations is derived using the relationship: weight =  $(\text{SpacingRadius} - \text{DistanceFromCell})/\text{SpacingRadius}$ , wherein DistanceFromCell is defined as the larger of the actual distance from the cell for which the accumulated value is being calculated to the adjacent cell that is being taken into consideration or half the diagonal cell width (average distance to corner); and SpacingRadius is a user-defined value representing the reservoir draining radius for each target. The SpacingRadius may be selected by the user based on a number of parameters (e.g., government regulations and/or financial considerations).

[061]  $\text{AccumValue} = (\text{CumWeightedValue}/\text{CumWeight})$  \*

$\text{CumWeightedArea}$ , wherein

[064] The “weight” in the above calculations may be derived using the relationship: weight =  $(\text{SpacingRadius} - \text{DistanceFromCell})/\text{SpacingRadius}$ , wherein DistanceFromCell is defined as the larger of the actual distance from the cell for which the accumulated value is being calculated to the adjacent cell that is being taken into consideration

or the half the diagonal cell width (average distance to corner); and SpacingRadius is a user-defined value representing the reservoir draining radius for each target. The SpacingRadius may be selected by the user based on a number of parameters (e.g., government regulations and/or financial considerations).

[065] Once the summation matrix is complete, the summation matrix is analyzed to determine the most desirable value in the matrix. (Stage 1014) Then, the location associated with this value is selected as the first target location (Stage 1016) and the value in the matrix associated with the first target and the values associated value associate with other[[s]] cells cell in the matrix that are within two times the user-defined radius are set to a value of zero for the selection of the next target location. (Stage 1018)

[066] Next, method 1000 proceeds to Stage 1020. In this stage, if a user-defined maximum cutoff for the number of targets has been reached or all the possible target have been located, method 1000 ends. (Stage 1020 and 1022). However, if the above is not true, method 1000 returns to Stage 1016 and selects, from the remaining values in the summation matrix, the most desirable value as the next target location. Then, in similar fashion to the process used to determine the previous target, the value in the matrix associated with the current target and the values associated value associate with other[[s]] cells cell in the matrix that are within two times the user-defined radius are set to a value of zero.